

ARG22568 anti-CD172a / SIRP alpha antibody [OX-41] (Biotin)

Package: 50 µg
Store at: 4°C

Summary

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| Product Description | Biotin-conjugated Mouse Monoclonal antibody [OX-41] recognizes CD172a / SIRP alpha. This antibody recognizes rat CD172a, also known as Signal regulatory protein (SIRP). CD172a is expressed selectively by myeloid cells and by neurons. MRC OX-41 binds to a different epitope on SIRP than ED9. It does not block the interaction of CD172a - CD47. |
| Tested Reactivity | Rat |
| Tested Application | FACS, IHC-Fr, IHC-P |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | OX-41 |
| Isotype | IgG2a |
| Target Name | CD172a / SIRP alpha |
| Species | Rat |
| Immunogen | Rat peritoneal macrophages. |
| Conjugation | Biotin |
| Alternate Names | CD172A; p84; SHPS1; SHPS-1; CD172 antigen-like family member A; Sirp-alpha-3; Sirp-alpha-1; BIT; MYD-1; MFR; Bit; PTPNS1; CD antigen CD172a; Inhibitory receptor SHPS-1; SIRP; MyD-1 antigen; Sirp-alpha-2; Tyrosine-protein phosphatase non-receptor type substrate 1; Signal-regulatory protein alpha-1; Signal-regulatory protein alpha-2; Signal-regulatory protein alpha-3; Macrophage fusion receptor; Brain Ig-like molecule with tyrosine-based activation motifs; P84; SHP substrate 1 |

Application Instructions

| Application table | Application | Dilution |
|-------------------|---|-----------------|
| | FACS | Assay-dependent |
| | IHC-Fr | Assay-dependent |
| | IHC-P | Assay-dependent |
| Application Note | <p>IHC-P: This product requires protein digestion pre-treatment of paraffin sections e.g. trypsin or pronase.</p> <p>FACS: Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p> | |

Properties

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| Form | Liquid |
| Purification | Purification with Protein G. |
| Buffer | PBS, 0.09% Sodium azide and 1.0% BSA. |

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| Preservative | 0.09% Sodium azide |
| Stabilizer | 1.0% BSA |
| Concentration | 0.1 mg/ml |
| Storage instruction | Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use. |
| Note | For laboratory research only, not for drug, diagnostic or other use. |

Bioinformation

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| Gene Symbol | Sirpa |
| Gene Full Name | signal-regulatory protein alpha |
| Background | The protein encoded by this gene is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on chromosome 20p13. Multiple alternatively spliced transcript variants have been determined for this gene. [provided by RefSeq, Jul 2008] |
| Function | Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. [UniProt] |
| Research Area | Cell Biology and Cellular Response antibody; Neuroscience antibody; Cardiomyocyte Cell Surface Marker antibody |
| Calculated Mw | 55 kDa |
| PTM | N-glycosylated. Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11. [UniProt] |
| Cellular Localization | Membrane; Single-pass type I membrane protein [UniProt] |